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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/518,110	03/03/2000	Eero Nikula	297-009281-US(PAR)	7553

7590

05/03/2005

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EXAMINER

JAIN, RAJ K

ART UNIT

PAPER NUMBER

2664

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/518,110	Applicant(s) NIKULA ET AL.	
	Examiner Raj K. Jain	Art Unit 2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 March 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: The title contains the word "realising" which is believed to be "realizing".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Frodigh et al (US Pat 6,125,148).

Regarding claims 1 and 14, Frodigh discloses a method for conveying signaling information from a transmitting device to receiving device (see Fig 1) in a cellular radio network where user data transmission takes place on a traffic channel (see col 2 lines 47-54) in discrete transmission bursts consisting of consecutive symbols, comprising the steps of:

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-formatting a piece of signaling information into symbols (col 1 lines 30-45, signal formatting is based on system employed and its requirements such as GSM, CDMA, etc.),

-transmitting the symbols carrying the signifying information as a block of consecutive symbols in a certain transmission burst of a traffic channel (see Fig 3 and col 7 lines 11-20 and lines 47-57, col 12 lines 10-30, each TDMA frame is subdivided in number of traffic channels or timeslots, consecutive TDMA frames use the same timeslot by the same user, each timeslot has reserve bits or symbols for inband signaling used for control information), and

- indicating within said certain transmission burst that it contains symbols carrying signaling information (see col 12 lines 9-30, each timeslot or burst has reserve bits for inband signaling, these bits or symbols are used to indicate control signaling information such as call setup, authentication and the like.).

Regarding claim 2, Frodigh discloses filling of transmission bursts based on HLM or LLM burst schemes (see col 2 lines 10-20).

Regarding claims 3, 4, 6 and 7 Frodigh discloses transmission of HLM and LLM modulated symbols transmitted next to each other, (see col 12 line 49, and col 10 lines 65-col 11 line 10).

Regarding claim 5, Frodigh discloses transmission burst consists of a first half with training sequence and a second half and the step of transmitting the symbols carrying the signaling information (see Fig 4 and col 7 lines 58-67).

Regarding claims 8 and 15, Frodigh discloses dual modulation schemes (see claim 21).

Regarding claim 9, Frodigh discloses various possible modulation schemes employable for digital systems (see col 1 lines 10-45).

Regarding claims 10 and 13, Frodigh discloses various possible schemes employable for digital systems (see col 1 lines 10-45) and modulation constellations (see Figs 2a and 2b) accordingly.

Regarding claim 11, Frodigh discloses placing of flag bits within the transmission bursts (see col 3 lines 28-34, col 4 lines 15-27 and claim 11).

Regarding claim 12, Frodigh discloses plurality of bits to indicate appropriate signaling information (see col 12 lines 9-30).

Response to Arguments

Applicant's arguments filed 28 February 2005, have been fully considered but they are not persuasive.

With respect to claim 1, Applicant contends the cited reference (Frodigh) does support the following limitation "transmitting the symbols carrying a block of consecutive symbols in a traffic channel and the signaling information as a certain transmission burst of traffic channel".

Frodigh discloses a method for conveying signaling information from a transmitting device (mobile or BTS, Fig 1) to receiving device in a cellular radio network where user data transmission takes place on a traffic channel (see col 2 lines 47-54) in

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discrete transmission bursts consisting of consecutive symbols, Each burst is formed of TDMA frame is subdivided in number of traffic channels or timeslots or bursts, consecutive TDMA frames use the same timeslot by the same user, each timeslot has reserve bits or symbols for inband signaling used for control information such as authentication, call setup and the like (see Fig 3 and col 7 lines 11-20 and lines 47-57, col 12 lines 10-30, each). Thus, Frodigh does in-fact discloses the contended limitation and therefore claim 1 stands rejected.

Claim 14 contains similar limitations and therefore remains rejected as well.

Dependent claims arising out of one or more of the above independent claims remain rejected based on cited limitation within the same reference.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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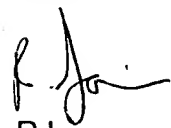
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raj Jain whose telephone number is 571-272-3145.

The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-

2600.



RJ

April 29, 2005



WELLINGTON CHIN
SUPERVISORY PATENT EXAMINER